Biomedical Optics EXPRESS

Vacuum-assisted tissue embedding for whole-heart imaging: supplement

ZHI WANG,^{1,2,†} RUIHENG XIE,^{1,†} QISHUO SHI,¹ YAFENG LI,¹ D JIN CHANG,¹ JING YUAN,^{1,2} D HUI GONG,^{1,2} D AND JIANWEI CHEN^{1,2,*} D

This supplement published with Optica Publishing Group on 4 May 2023 by The Authors under the terms of the Creative Commons Attribution 4.0 License in the format provided by the authors and unedited. Further distribution of this work must maintain attribution to the author(s) and the published article's title, journal citation, and DOI.

Supplement DOI: https://doi.org/10.6084/m9.figshare.22708042

Parent Article DOI: https://doi.org/10.1364/BOE.488766

¹Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics, MoE Key Laboratory for Biomedical Photonics, Huazhong University of Science and Technology, Wuhan, China ²HUST-Suzhou Institute for Brainsmatics, JITRI, Suzhou, China

[†]These authors contributed equally

^{*}jchen1@hust.edu.cn

VACUUM-ASSISTED TISSUE EMBEDDING FOR WHOLE HEART SECTIONING AND IMAGING: SUPPLEMENTAL DOCUMENT

Supplementary Figures

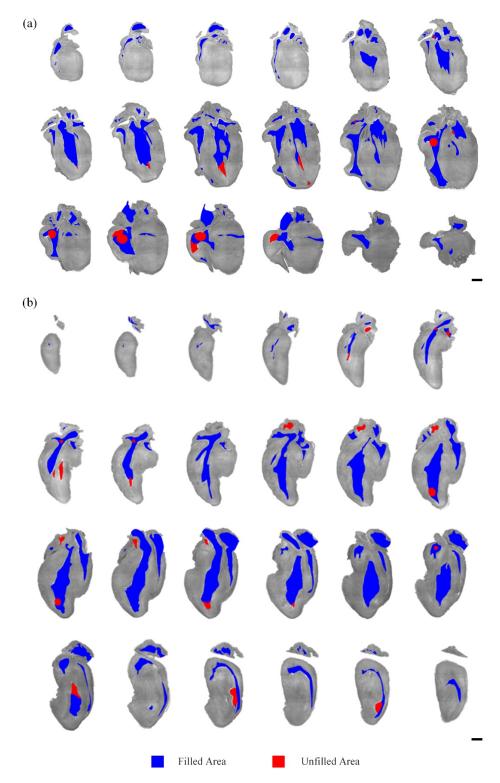


Fig. S1. Quantitative analysis of agarose filling effect of 18-week-old mouse hearts with different sexes, (a) male and (b) female. The blue indicates the agarose-filled area and the red indicates the hollow area. Scale bars: $(a-b)\ 1$ mm.

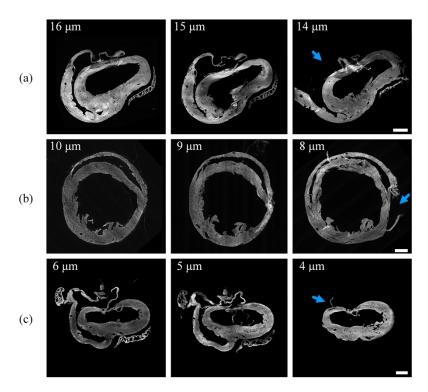


Fig. S2. Cutting the agarose-embedded whole-heart tissue in axial plane with a concentration of (a) 4%, (b) 5%, and (c) 6%, respectively; arrows indicate the location of tissue breakage. Scale bars: 1 mm.

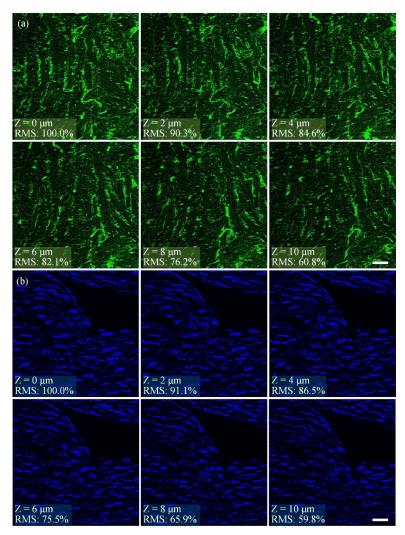


Fig. S3. Effective imaging depth measurement. LiMo imaging of (a) TRITC-dextran-labeled and (b) DAPI-labeled heart tissue at depth of 52 μm with a Z increment of 1 μm , Z = 0 at the top surface of the sample. Scale bars: 20 μm .